

REMARKS

Claims remaining in the present patent application are numbered 1-9 and 10-27. Claims 10 and 28 are canceled. The rejections and comments of the Examiner set forth in the Office Action dated February 9, 2004 have been carefully considered by the Applicants. Applicants respectfully request the Examiner to consider and allow the remaining claims.

35 U.S.C. §102 Rejection

The present Office Action rejected Claims 1-4, 6-9, 11-18 under 35 U.S.C. §102(e), as being anticipated by Swanson et al. (U.S. Patent no. 4,496,976). Applicants have reviewed the cited reference and respectfully contend that the cited reference neither teaches nor suggests the presently claimed invention.

Independent Claim 1

Independent Claims 1 stands rejected under 35 U.S.C. §102(e) as being anticipated by Swanson et al. Independent Claim 1 recites, in part:

[A] method of interfacing media, said method comprising the steps of:

displaying continuously a first media data type on a display having contiguous lines, said display having a line-to-line correspondence with said first media data type

requesting from a source device a first line of data of a second media data type before a predetermined line of data of said first media data type is displayed;

receiving said first line of data into a single first-in-first-out (FIFO) buffer . . .

mixing said first line of data with said predetermined line of data;

displaying said first line of data and said predetermined line of data concurrently on a predetermined line of said display without any interruption in the displaying of said first media data type; and

on a line-by-line basis repeating for a second line of data of said second media type. (Emphasis Added)

Embodiments of the present invention, as claimed in independent Claim 1 disclose a method of interfacing two media of varying formats. In particular, while a first media data type is continuously displayed on a display, on a line-by-line basis, a line of data of a second media type is requested for mixing with a predetermined line of the first media data type that corresponds to the same line of the display. Each of the lines of data of the second media type is received and temporarily stored into a single first-in-first-out (FIFO) buffer. That is, whether the first and second media type is displayed in an interlaced or progressive scan mode, the lines of data of the second media type are received in the FIFO buffer.

In contrast, the Swanson et al. reference is directed to a system and technique for a reduction in memory for the display of superimposed data, where the display of the

superimposed data over video data is performed in an interlaced mode, with alternating lines sets of raster lines being processed and displayed. That is, the Swanson et al. reference requires the use of two memories for the storage of the data that is superimposed over video data. Thus, the Swanson et al. reference teaches away from the embodiments of the present invention which discloses the use of a single FIFO buffer for receiving the lines of data of the second media type in which data is displayed in an interlaced or progressive mode, as described in independent Claim 1.

Furthermore, embodiments of the present invention as disclosed in independent Claim 1 perform the interfacing of the first media type and the second media type on a line-by-line basis. That is, a line of data from the second media type is requested, received and processed with a predetermined line of data from the first media type that corresponds to a single line on a display. This method of operation is performed for every line in the display on a line-by-line basis. While the Swanson et al. reference does disclose the open-ended reduction of capacity of memory so long as the reading and writing times from the two memories do not interrupt the TV image (See Swanson et al. at col. 7, lines 15-19), the Swanson et al. reference never teaches the line-by-line processing of the present invention, as described in independent Claim 1.

Thus, Applicants respectfully submit that the Swanson et al. reference does not show nor suggest embodiments of the method of the present invention as recited in independent Claim 1. Accordingly, Applicants respectfully submit that independent Claim 1 overcomes the cited reference, and as such Claims 2-9 which depend on independent Claim 1 are also in a condition for allowance as being dependent on an allowable base claim.

Independent Claim 11

Independent Claim 11 stands rejected under 35 U.S.C. §102(e) as being anticipated by Swanson et al. Independent Claim 11 recites, in part:

[A] method of interfacing media, said method comprising the steps of:

displaying continuously a first media data type on a display having contiguous lines in a progressive mode, said display having a line-to-line correspondence with said first media data type...

requesting from a source device a first line of data of a second media data type before a predetermined line of data of said first media data type is displayed; . . .

mixing said first line of data with said predetermined line of data; and

displaying said first line of data and said predetermined line of data concurrently on a predetermined line of said display without any interruption in the displaying of said first media data type. (Emphasis Added)

Embodiments of the present invention, as claimed in independent Claims 1 and 18 disclose a method of interfacing

two media of varying formats. In particular, while a first media data type is continuously displayed on a display in a progressive mode, on a line-by-line basis, a line of data of a second media type is requested for mixing with a predetermined line of the first media data type that corresponds to the same line of the display.

In contrast, the Swanson et al. reference is directed to a system and technique for a reduction in memory for the display of superimposed data, where the display of the superimposed data over video data is performed in an interlaced mode, with alternating lines sets of raster lines being processed and displayed. This is in direct contrast to the present invention, which discloses the display lines of the data of the first and second media type in a progressive mode, as described in independent Claim 11.

As a result, the Swanson et al. reference displays superimposed data over video data in an interlaced mode and requires the use of two memory buffers for processing, one for the first set of alternating lines of the video display, and another for the second set of alternating lines of the video display in an interlaced mode of displaying data. In contrast, embodiments of the present invention only require the use of a single first-in-first-out (FIFO) buffer for displaying data in a progressive mode, as described in independent Claim 11.

Thus, Applicants respectfully submit that the Swanson et al. reference does not show nor suggest embodiments of the method of the present invention as recited in independent Claim 11. Accordingly, Applicants respectfully submit that independent Claim 11 overcomes the cited reference, and as such Claims 12-18 which depend on independent Claim 11 are also in a condition for allowance as being dependent on an allowable base claim.

35 U.S.C. §103 Rejection

The present Office Action rejected Claims 5, 14, 19-27 under 35 U.S.C. §103(a) as being unpatentable over the Swanson et al. reference. Applicants have reviewed the cited reference and respectfully contend that the cited reference neither teaches nor suggests the presently claimed invention.

For analogous arguments set forth in independent Claims 1, embodiments of the present invention disclose the interfacing of various media data types onto a display on a line-by-line basis. In particular, the present invention interfaces two media data types by receiving a line of data of a second data type into a single FIFO buffer while a first media data type is continuously displayed on a display. That is, whether data from the first and second media type is displayed in an interlaced or progressive scan mode, the

lines of data of the second media type are received into a single FIFO buffer. The Swanson et al. reference neither discloses, teaches, nor suggests the receiving of the data of the second media data type into a single FIFO buffer for processing, as is described in independent Claim 19 of the present invention.

Thus, Applicants respectfully submit that the Swanson et al. reference does not show nor suggest embodiments of the method of the present invention as recited in independent Claim 19. Accordingly, Applicants respectfully submit that independent Claim 19 overcomes the cited reference, and as such Claims 20-27 which depend on independent Claim 19 are also in a condition for allowance as being dependent on an allowable base claim.

CONCLUSION

In light of the facts and arguments presented herein, Applicants respectfully request reconsideration of the rejected Claims.

Based on the arguments presented above, Applicants respectfully assert that Claims 1-27 overcome the rejections of record. Therefore, Applicants respectfully solicit allowance of these Claims.

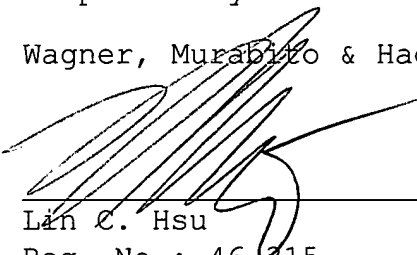
The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Respectfully submitted,

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